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PTO/SB/21 (05-03)

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<b>TRANSMITTAL FORM</b>  (to be used for all correspondence after initial filing)		Application Number	10/715,348
		Filing Date	November 14, 2003
		First Named Inventor	RAMACHANDRAN, JANAKIRAMAN
		Group Art Unit	1645
		Examiner Name	Not yet assigned
Total Number of Pages in This Submission		Attorney Docket Number	GANG-008
<b>ENCLOSURES (check all that apply)</b>			
<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment / Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Supplemental Information Disclosure Statement and SB08a Form (9 pgs.) <input type="checkbox"/> Certified Copy of Priority Documents <input type="checkbox"/> Response to Missing Parts/ Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Assignment Papers (for an Application) <input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s)	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):  103 References  Postcard	
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<b>SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT</b>			
Signing Attorney/Agent (Reg. No.)	CAROL L. FRANCIS, 36,513 BOZICEVIC, FIELD & FRANCIS, LLP		
Signature			
Date	March 21, 2005		
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Attorney Docket	GANG-008
First Named Inventor	RAMACHANDRAN,
Application Number	10/715,348
Confirmation No.	2395
Filing Date	November 14, 2003
Group Art Unit	1645
Examiner Name	Not yet assigned
Title:	"INCAPACITED WHOLE-CELL IMMUNOGENIC BACTERIAL COMPOSITIONS PRODUCED BY RECOMBINANT EXPRESSION"

Sir:

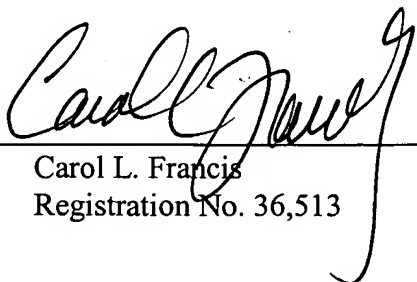
This is an Information Disclosure Statement submitted for the Examiner's consideration. A Form PTO-SB/08A listing the references and copies of the cited references accompany this paper. Applicants would appreciate the Examiner's initialing and returning the form to indicate that the references have been reviewed and made of record.

This Information Disclosure Statement is not intended as a representation that a search has been made, that additional information material to the examination of this application does not exist, or that any one of the above references constitutes prior art to the present application within the meaning of 35 U.S.C. §102.

As applicants have not yet received a first Action on the merits, no fee is believed to be required for filing this Disclosure Statement. If, however, the PTO finds that for some reason a fee is due, our Deposit Account No. 50-0815, Order No. GANG-008 may be charged thereon.

Respectfully submitted,  
BOZICEVIC, FIELD & FRANCIS LLP

Date: March 31, 2005

By:   
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			First Named Inventor	RAMACHANDRAN, JANAKIRAMAN	
			Art Unit	1645	
Sheet	2	of	8	Attorney Docket Number	GANG-008

OTHER PRIOR ART—NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T 2
	C1	Ackermann, "Tailed bacteriophages: the order caudovirales," <i>Adv Virus Res</i> , 51:135-201. (1998)	
	C2	Arendt et al., Molecular Characterization of Lactorcoccal Bacteriophage Tuc2009 and Identification and Analysis of Genes Encoding Lysin, a Putative Holin, and Two Structural Proteins," <i>Applied and Environment Microbiology</i> , June 1994, p. 1875-1883, vol. 60, No. 6.	
	C3	Auad et al., "Physical mapping and partial genetic characterization of the <i>Lactobacillus delbrueckii</i> subsp. <i>bulgaricus</i> bacteriophage lb539," <i>Arch Virol</i> , 144: 1503-1512. (1999)	
	C4	Bernhardt, et al., "Genetic Evidence that the Bacteriophage OX174 Lysis Protein Inhibits Cell Wall Synthesis" <i>Proc. Natl. Acad Sci. Vol. 97, No. 8, Pages 4297-4302 (April 2000).</i>	
	C5	Boizet et al., "Cloning, expression and sequence analysis of an endolysin-encoding gene of <i>Lactobacillus bulgaricus</i> bacteriophage mv1." <i>Gene</i> , 94: 61-67 (1990)	
	C6	Botstein et al., "Strategies and Applications of in Vitro Mutagenesis," <i>Science</i> 229, Vol. 229, pg. 1193-1201, Number 4719 (1985)	
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	C8	Calandra et al., "Lysis and protoplast formation of group B streptococci by mutanolysin," <i>Infect Immun</i> , 28: 1033-1037 (1980)	
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	C11	Chalfie et al., "Green Fluorescent Protein as a Marker for Gene Expression," <i>Science</i> , Vol. 263, 802-805 1994	
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	C13	Cohen et al., "Simple procedure for production by group C streptococci of phage- associated lysin active against group A streptococci," <i>Appl Microbiol</i> , 29: 175-178 (1975)	

Examiner Signature		Date Considered	
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			Confirmation Number	2395	
			First Named Inventor	RAMACHANDRAN, JANAKIRAMAN	
Sheet	3	of	8	Art Unit	1645
				Attorney Docket Number	GANG-008

C14	Cole et al., "The EBV-hybridoma technique and its application to human lung cancer," Monoclonal Antibodies And Cancer Therapy, Alan R. Liss, Inc., pp. 77-96 (1985)
C15	Cote et al., "Generation of human monoclonal antibodies reactive with cellular antigens," Proc. Natl. Acad. Sci. USA 80: 2026-2030 (1983)
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C17	Coleman et al., "Staphylococcus aureus bacteriophages mediating the simultaneous lysogenic conversion of beta-lysin, staphylokinase and enterotoxin A: molecular mechanism of triple conversion. <i>J Gen Microbiol</i> , 135:
C18	Cooney et al., "Molecular cloning and genetic analysis of the determinant for gamma-lysin, a two-component toxin of Staphylococcus aureus," <i>J Gen Microbiol</i> , 134:2179-2188 (1988)
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C25	Fischetti et al., "Purification and physical properties of group C streptococcal phage-associated lysine," <i>J Exp Med</i> , 133: 1105-1117 (1971)
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			First Named Inventor	RAMACHANDRAN, JANAKIRAMAN	
Sheet	4	of	8	Art Unit	1645
				Attorney Docket Number	GANG-008

C30	Garrett, "Cell Lysis by induction of cloned lambda lysis genes," J. et al. Mol. Gen. Genet. 182, 326 (1981)
C31	Garvey et al., "Nucleotide sequence of bacillus phage $\Phi$ 29 genes 14 and 15: homology of gene 15 with other phage lysozymes," Nucleic Acids Res. 14, 10001 (1986)
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C33	Henikoff, "Unidirectional digestion with exonuclease III creates targeted breakpoints for DNA sequencing," Gene 28, 351 (1984)
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C35	Higuchi et al., "A general method of in vitro preparation and specific mutagenesis of DNA fragments: study of protein and DNA interactions," Nucleic Acids Res. 16, 7351 (1988)
C36	Hill et al., "Identification of a lysin associated with a bacteriophage (A25) virulent for group A streptococci. <i>J Bacteriol</i> , 145: 696-703 (1981)
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C42	Kohler et al., "Continuous cultures of fused cells secreting antibody of predefined specificity," <i>Nature</i> 256, 495-497 (1975)
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C44	Kuhnemund, "Studies on the lysis of streptococcus pyogenes (group A, type 1) by phage-associated lysin (author's transl)" <i>Z Immunitatsforsch Exp Klin Immunol</i> , 143:184-191 (1972)
C45	Loessner et al., "Heterogeneous endolysins in <i>Listeria monocytogenes</i> bacteriophages: a new class of enzymes and evidence for conserved holin genes within the siphoviral lysis cassettes," <i>Mol Microbiol</i> , 16: 1231-1241
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C47	Mermod et al., "Vector for regulated expression of cloned genes in a wide range of gram-negative bacteria," J. Bacteriol. 167, 447(1986)
C48	Mindich et al., "Cell wall lysin as a component of the bacteriophage phi 6 virion," J Virol, 30: 489-496 (1979)
C49	Mullan et al., "Lysin production by phi C2(W), a prolate phage for Streptococcus lactis C2," J Dairy Res, 52: 113-121 (1985)
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C52	Newton et al., "Expression and immunogenicity of an 18-residue epitope of HIV1 gp41 inserted in the flagellar protein of a salmonella live vaccine," Res. Microbiol. 146, 203-216 (1995)
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C54	Norrby, E., Summary, in Vaccines 85, Lerner, R. A., R. M. Chanock, and F. Brown (eds.), Cold Spring Harbor Laboratory, Cold Spring Harbor, N.Y., pp. 388-389 (1985)
C55	Oki et al., "Cloning, sequence analysis, and expression of the genes encoding lytic functions of Bacteriophage phi g1e," Gene, 176: 215-223 (1996)
C56	Owen et al, "Nucleotide sequence of the lysozyme gene of bacteriophage T4 - analysis of mutations involving repeated sequences," J. Mol. Biol. 165, 229 (1983) Schmidt et al. J. Bacteriol. 178, 1099 (1983)
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C58	Raina, "Purification of Streptococcus group C bacteriophage lysine," J Bacteriol, 145: 661-663 (1981)
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C63	Schmidt et al., "Three functions of bacteriophage p1 involved in cell lysis," <i>J. Bacteriol.</i> , vol. 178, no. 4, 1099-1104 (1996)
C64	Shearman et al., "Cloning and DNA sequence analysis of a Lactococcus bacteriophage lysin gene," <i>Mol Gen Genet</i> , 218: 214-221 (1989)
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C66	Sheehan et al., "Analysis of the catalytic domain of the lysin of the lactococcal bacteriophage Tuc2009 by chimeric gene assembling," <i>FEMS Microbiol Lett</i> , 140: 23-28 (1996)
C67	Sheehan et al., "The lytic enzyme of the pneumococcal phage Dp-1: a chimeric lysin of intergeneric origin." <i>Mol Microbiol</i> , 25: 717-725 (1997)
C68	Sheehan et al., "Identification and characterization of a lysis module present in a large proportion of bacteriophages infecting Streptococcus thermophilus." <i>Appl Environ Microbiol</i> , 65: 569-577 (1999)
C69	Shortle et al., "Gap misrepair mutagenesis: efficient site-directed induction of transition, transversion, and frameshift mutations in vitro." <i>Proc.Natl.Acad.Sci.USA</i> 79, 1588 (1982)
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			Application Number	10/715,348	
			Filing Date	November 14, 2003	
			Confirmation Number	2395	
			First Named Inventor	RAMACHANDRAN, JANAKIRAMAN	
Sheet	7	of	8	Art Unit	1645
				Attorney Docket Number	GANG-008

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